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FRUIT CULTURE.

[The following is copied from Downing's "Fruits and Fruit Trees of America":]

Influence of the Stock and Graft.—The well-known fact that we may have a hundred different varieties of pear upon the same tree, each of which produces its fruit of the proper form, and quality; and that we may have, at least for a time, several distinct, though nearly related species upon one stock, as the peach, apricot, nectarine, and plum, proves very conclusively the power of every grafted or budded branch, however small, in preserving its identity. To explain this, it is only necessary to recall to mind that the ascending sap, which is furnished by the root or stock, is nearly a simple fluid; that the leaves digest and modify this sap, forming a proper juice which re-descends in the inner bark, and that thus every bud and leaf upon a branch maintains its individuality by preparing its own proper nourishment, or organizing matter, out of that general aliment, the sap. Indeed, according to De Candolle, each separate cellule of the inner bark has this power of preparing its food according to its nature; in proof of which a striking experiment has been tried by grafting rings of bark, of different allied species, one above another on the same tree without allowing any buds to grow upon them. On cutting down and examining this tree, it was found that under each ring of bark was deposited the proper wood of its species, thus clearly proving the power of the bark in preserving its identity, even without leaves.

On the other hand, though the stock increases in size by the woody matter received in the descending sap from the graft, yet as this descends through the inner bark of the stock, it is elaborated by, and receives its character from the latter; so that after a tree has been grafted fifty years, a shoot, which springs up from its trunk below the place of union, will always be found to bear the original wild fruit, and not to have been in the least affected by the graft.

But, whilst grafting never effects any alteration in the identity of the variety or species of fruit, still it is not to be denied that the stock does exert certain influences over the habits of the graft. The most important of these are dwarfing, inducing fruitfulness, and adapting the graft to the soil or climate.

Thus every one knows that the slower habit of growth in the quince stock is shared by the pear grafted upon it, which becomes a dwarf; as does also the apple when worked on the paradise stock, and, in some degree, the peach on the plum. The want of entire similarity of structure between the stock and graft, confines the growth of the latter, and changes it, in the case of the pear, from a lofty tree to a shrub eight or ten feet in height. The effect of this difference of structure is very apparent when the peach is grafted on the plum, in the greater size of the trunk above, as compared with that below the graft—a fact which seems to arise from the obstruction which the descending sap of the graft finds in its course through the bark of the stock.

To account for the earlier and greater fruitfulness caused by grafting on a stock of slower growth, Mr Knight, in one of his able papers, offers the following excellent remarks:

"The disposition in young trees to produce and nourish blossom-buds and fruit, is increased by the apparent obstruction of the descending sap; and the fruit, I think, ripens somewhat earlier than upon other young trees of the same age which grow upon stocks of their own species. But the growth and vigor of the tree, and its power to nourish a succession of heavy crops, are diminished, apparently, by the stagnation in the branches and stock of a portion of that sap which, in a tree growing on its own stem, or upon a stock of its own species, would descend to nourish and promote the extension of its own roots. The practice, therefore, of grafting the pear on the quince, and the peach on the plum, when extensive growth and durability are wanted, is wrong; but it is eligible wherever it is wished to diminish the vigor and growth of the tree, and its durability is not so important." In adapting the graft to the soil, the stock has a marked influence. Thus, in dry chalky soils, where the peach on its own roots, will scarcely grow, it is found to thrive admirably budded on the almond. We have already mentioned that in clay soils, too heavy and moist for the peach, it succeeds very well if worked on the plum. M. Floss, a Prussian gardener, succeeded in growing fine pears in very sandy soils, where it was nearly impossible to raise them before, by grafting them on the mountain ash, a nearly related tree, which thrives on the dryest and lightest soil.

A variety of fruit which is found rather tender for a certain climate, or a particular neighborhood, is frequently acclimatized by grafting it on a native stock of very hardy habits. Thus, near the seacoast, where the finer plums thrive badly, we have seen them greatly improved by being worked on the beech plum, a native stock adapted to the spot; and the foreign grape is more luxuriant when grafted on our native stocks.

A slight effect is sometimes produced by the stock on the quality of the fruit. A few sorts of pears are superior in flavor, but many are also inferior, when grafted on the quince, while they are more gritty on the thorn. The Green Gage, a plum of great delicacy of flavor, varies considerably upon different stocks, and apples raised on the crab, and pears on the mountain ash, are said to keep longer than when grown on their own roots.

In addition to the foregoing, a diseased stock should always be avoided, as it will communicate disease slowly to the graft, unless the latter is a variety of sufficient vigor to renew the health of the stock which is but seldom the case.

The cultivator will gather from these remarks that in a favorable climate and soil, if we desire the greatest growth, duration, and development in any fruit, (and this applies to orchards generally,) we should choose a stock of a closely similar nature to the graft: an apple seedling for an apple, a pear seedling for a pear. If we desire dwarf trees, that come into bearing very young, and take a little space in a garden, we employ for a stock an allied species of slower growth. If our soil or climate is unfavorable, we use a stock which is adapted to the soil, or which will by its hardier roots, endure the cold.

The influence of the graft on the stock seems scarcely to extend beyond the power of communicating disease. A graft, taken from a tree enfeebled by disease, will recover with difficulty, even if grafted on healthy stocks for a dozen times in repeated succession. And when the disease is an inherent or hereditary one, it will certainly communicate it to the stock. We have seen the *yellows* from a diseased peach tree, propagated through hundreds of individuals by budding, and the stock and graft both perish together from its effects.

PRUNING.—1. *Pruning to Promote Growth or Modify the Form of Fruit Trees.*—A judicious pruning to modify the form of our standard trees, is nearly all that is required in ordinary practice. Every fruit tree grown in the open orchard or garden, as a common standard, should be allowed to take its natural form, the pruning going no further than to take out all weak and crowded branches; those which are filling uselessly the interior of the tree, where their leaves cannot be duly exposed to the light and sun, or those which interfere with the growth of others. All pruning of large branches in healthy trees should be avoided by examining them every season, and taking out superfluous shoots while small. Mr Coxe, the best American author on fruit trees, remarks very truly "when orchard trees are much pruned, they are apt to throw out numerous superfluous suckers from the boughs in the following summer; these should be rubbed off when they first appear, or they may easily be broken off while young and brittle—cutting is apt to increase their number."

Where pruning is not required to renovate the vigor of an enfeebled tree, or to regulate its shape, in other words, in the case of a healthy tree which we wish to retain in a state of the greatest luxuriance, health, and vigor, it may be considered worse than useless. Bearing in mind that growth is always corresponding to the action of the leaves and branches, if these are in due proportion, and in perfect health, the knife will always be found rather detrimental to luxuriance and constitutional vigor than beneficial.

The best season for pruning to promote growth, theoretically, is in autumn, soon after the fall of the leaf. Next to this, winter pruning, performed in mild weather, is best, and in orchards this is the season usually most convenient. In all parts of the country where the winters are not very severe, (and always in the Southern and Western States,) the roots are collecting a certain stock of nourishment during the whole autumn and winter. When a tree is pruned in autumn and winter, this whole supply goes to the remaining branches, while in the case of spring pruning, it is partly lost. North of 43°, however, the winters are so severe, that winter pruning should be deferred till the last of February.

We should especially avoid pruning at that pe-

riod in spring when the buds are swelling, and the sap is in full flow, as the loss of sap by bleeding is very injurious to most trees, and, in some, brings on a serious and incurable canker in the limbs.

There are advantages and disadvantages attending all seasons of pruning, but our own experience has led us to believe that, practically, a fortnight before midsummer, is by far the best season on the whole, for pruning in the Northern and Middle States. Wounds made at this season heal over freely and rapidly; it is the most favorable time to judge of the shape and balance of the head, and to see at a glance which branches require removal; and all the stock of organizable matter in the tree is directed to the branches that remain.

In pruning large limbs, some composition should always be at hand to cover the wound. Many compositions have been recommended for this purpose which, under our summer sun and wintry frosts, are nearly worthless, as they generally crack and fall off in a single year. The following is a cheap and admirable application, which we recommend to all cultivators of fruit trees:

Take a quart of alcohol and dissolve in it as much gum shellac as will make a liquid of the consistence of paint. Apply this to the wound with a common paint brush, always paring the wound smoothly first with a knife. The liquid becomes perfectly hard, adheres closely, excludes the air perfectly, and is affected by on changes of weather while at the same time, its thinness offers no resistance to the lip of the new bark that gradually closes over the wound.

Ignorant cultivators frequently weaken the energies of young trees, and cause them to grow up with lean and slender stems, by injudiciously trimming off the young side shoots and leaves, in the growing season. The stem is thus deprived of all the leaves which would attract and elaborate the sap, thus preparing nourishment for the growth of the stem; and the trunk of the tree does not increase in size half so fast as when the side branches are allowed to remain for a time, pruning them away gradually. It is better, in the case of these young trees, to *stop* the side branches when of moderate length, by pinching off the terminal bud.

2. *Pruning to induce Fruitfulness.*—When a young fruit tree is too luxuriant, employing all its energies in making vigorous shoots, but forming few or no blossom buds, and producing no fruit, we have it in our power by different modes of pruning, to lessen this over-luxuriance, and force it to expend its energies in fruit-bearing. The most direct and successful mode of doing this, is by *pruning the roots*—a proceeding recently brought into very successful practice by European gardeners.

Root pruning has the effect of at once cutting off a considerable supply of the nourishment formerly afforded by the roots of a tree. The leaves, losing part of their usual food, are neither able to grow as rapidly as before, nor to use all the nutritious matter already in the branches; the branches therefore become more stunted in their growth, the organizable matter accumulates, and fruit-buds are directly formed. The energies of the tree are no longer entirely carried off in growth, and the returning sap is employed in producing fruit-buds for the next year.

Root pruning should be performed in autumn or winter, and it usually consists in laying bare the roots and cutting off smoothly, at a distance of a few feet from the trunk, (in proportion to the size of the tree,) the principal roots. Mr Rivers, an English nurseryman of celebrity, who has practiced this mode with great success, digs a trench early in November, eighteen inches deep, round his trees to be root pruned, cutting off the roots with a sharp spade. By following this practice every year, he not only throws his trees into early bearing, but forces apples, pears, and the like, grafted on their own roots, to become prolific dwarfs, growing only six feet apart, trained in a conical form, full of fruit branches, and producing abundantly. These dwarf trees, thus annually root pruned, he supplies abundantly with manure at the ends of the roots, thus keeping up their health and vigor. The plan is an admirable one for small gardens, or for amateurs who wish to grow a great many sorts in a small surface.

Inducing fruitfulness by other means.—The influence of certain soils on the productiveness of fruit trees is a subject of every-day observation, but the particular ingredients of the soil, which insure this abundant bearing, is not so well known. Limestone soils are almost invariably productive of all sorts of fruit, and certain strong loams of this country seem to be equally well adapted to this end.

In a curious work called the "Rejavenescence of plants," etc., by Dr. Schultz, of Berlin, the author, who has devoted considerable time to the subject, states that common salt and chloride of lime contribute greatly to the flowering of most plants to which, however, they can only be applied with safety in small quantities. "Salts of lime," he continues, appear to produce so nearly the same effect as those of potash and soda, that it is only necessary to place lime within their reach, if there is no deficiency of manure in the shape of general food. Lime will, in the main, promote, in an astonishing degree, the fruiting and flowering of most plants, because calcareous salts promote evaporation and the concentration of the sap."

Although we cannot coincide with many of Dr. Schultz's views, as expressed in this work, yet the remarks just quoted agree so entirely with facts that have come under our own observation, that we gladly place them before the cultivator of fruit trees. One of the most productive fruit gardens in our knowledge is on a limestone soil, and another more than usually prolific, in a neighborhood not very fruitful, is every year treated with a top-dressing of coarse salt, at the rate of two bushels to the acre. These facts are surely worth the attention of growers, and should be the subject of more extended and careful experiments.

From the Maine Cultivator.

DOES BUCK WHEAT IMPROVE THE SOIL?

Messrs. Editors:—Some years since while I was a subscriber to the Yankee Farmer, I was occasionally struck with the remark that Buck Wheat would improve the soil; in other words, that light, arenacious lands in which the defect of a due cohesion among the constituent particles was obvious, while at the same time (as is usually the case with soils of this description) there is a superabundance of acid manifestly present in its texture, would be regenerated simply by sowing this grain, the only manure or stimuli required to secure this result being lime.—Now I have tried this plan till I am confidently persuaded it is all whim and theory,—that Buck Wheat is an exhausting crop, and furthermore that it takes *far more* from the soil than it returns to it, *unless you plough in the whole crop.* In this way, *with the lime*, the action of which is durable and lasting, you may possibly, *in time*, effect some degree of improvement; but by sowing *buck wheat*, simply, *if the crop be harvested*, you are certain to effect the deterioration of the soil more rapidly than in any other way with which I am acquainted—the cultivation of Flax not excepted.

Yours, P. G.——s.

Remarks:—The amelioration of a poor soil through the agency above alluded to, depends upon many concurring circumstances which, or most of which, our correspondent seems not to have taken into the estimate. It should ever be regarded as a fundamental and incontrovertible axiom in agriculture, that a crop growing and maturing its seed on the soil, necessarily diminishes its fertility. Even those plants denominated *aerial*, and which doubtless derive a large proportion of their nutriment from the atmosphere, draw largely upon the mineral resources of the soil. This fact is clearly demonstrated by the following experiment:

If we take a plant of buck wheat, including of course the entire structure, roots, haulm, leaves and seed, and dry it in an oven heated to the temperature of eightysix degrees, Fahrenheit, we shall find that it will yield about four per cent. of ashes. These ashes submitted to the operation of the analytical chemist will be found to be composed of twentynine parts of potass salts, fortyfive parts of lime and magnesia salts, and twentysix parts of silica, or sand. Now it is an established principle in vegetable physiology that a soil to be fertile in the production of any given product, must contain the mineral matters found in the ashes of that product, whether it be root or grain. By the above experiment the reader will perceive that buckwheat, though ordinarily classed by practical farmers as a non-exhauster, deprives the soil chiefly of its lime and magnesia salts.

These are valuable constituents, and are operative in some degree, either directly or collaterally, in the sustenance of a variety of crops; for in wheat we find that in one hundred parts there is not less than twelve per cent of lime, and fiftyone per cent of silica or sand; so that in the *grain* of wheat, to say nothing of other constituents, we have two of the constituent elements of buckwheat, both of which are derived expressly from the soil. Our correspondent is right in his corollary respecting the "turning in" of this crop. On most soils no method of speedy improvement has been found more successful than this. We do not know as we have ever been brought acquainted with an experiment in which the result has not amply realized the expectations of the experimenter. On old fields, the productive energies of which have been reduced by injudicious cropping, its operations have been wonderful.—*Eds. Cult.*

Keeping Your Pigs in Winter.—There is both negligence and mistake in the way of wintering pigs. I am not talking to those whose manner of keeping stock is, to let stock take care of themselves, but to farmers who *mean to be careful.* Hogs should be *sorted.* The little ones will, otherwise, be cheated at the trough, and overlaid and smothered in the sleeping heap. There should not be too many in one enclosure; especially young pigs should not sleep in crowds, for, although they sleep warmer, they will suffer on that very account. Lying in piles, they get sweaty; the skin is much more sensitive to the cold, and coming out in the morning reeking and smoking the keen air pierces them. In this way, young pigs die off in the winter by being too warm at night.—*Indiana Farmer.*

WINTERING STOCK.

Throughout a considerable portion of the country, there is a scarcity of materials on which to feed stock the coming winter. The general warmth and moisture of the atmosphere, however, since the occurrence of rains in the beginning of autumn, have much promoted the growth of grass; thus fortunately affording an opportunity for grazing up to a late period of the season. And where fields of rye have been sown for the purpose of giving late fall and early spring pasturage, the favorableness of the season has probably induced a growth which will furnish support in a great degree, to light cattle and sheep. Yearlings, calves, and sheep, may therefore be grazed on such fields, care being taken that the bite is not too short, till snow covers the ground; and the spring growth may be availed of for the same purpose, to a longer or shorter period, according to the necessities of the farmer, or the wants of his stock. If, while the stock is feeding on rye, too lax a state of the bowels occurs, as is sometimes the case, owing to the succulence of the rye, the animals should be fed with some dry hay, and a little salt as a condiment, which will check the tendency to purge.

But under all circumstsnces, the most economical appropriation of the winter's stock of fodder, becomes an important desideratum. The great aim should be the maintenance of the stock in proper condition with the least expense. The materials at the disposal of farmers for this purpose, consist usually of hay, straw of various grains, fodder of Indian corn, different vegetablss in greater or less quantities, with occasionally some meal or "mill stuffs." A general saving of all rough fodder may be made by cutting with a machine. This saving results in various ways, some of which we will specify.

1. Coarse fodder, such as rank hay, straw, or corn-stalks, are thus wrought into a more convenient form for mastication, by which animals are often induced to eat that which would otherwise be rejected, or only partially consumed. This is particularly the case with clover hay, more or less of which is almost always wasted if fed in the long state, but when passed through a cutter, if it has been properly cured, is readily eaten perfectly clean. The same remark is applicable, but in a less degree, to straw and corn fodder.

2. By cutting, fodder of inferior quality may be easily mixed in any desired proportions with that which is better or more palatable, and the poorer kind thus be made to conduce to the animal's support. Cutting also affords a convenient mode of mixing meal, shorts, or bran, with fodder, by which may be gained the double advantage of inducing stock to eat less palatable articles, and of so diffusing the meal that all its nutriment is appropriated by the animal.

3. Besides the advantages above mentioned, another and not less important benefit is known to be derived by laboring animals in the additional time it affords them for rest—the cutting performing in a great degree the work of chewing and preparation for digestion. This benefit is regarded as so important by those accustomed to feeding work horses and oxen on cut food, that nothing would induce them to discontinue the practice.

There are cases, however, in which the advantages of cutting may not repay the expenses. If the food to be used is wholly hay of very fine quality, and the stock consuming it is not required to labor, it might be so fed that no waste would accrue, or nothing be gained by cutting. But wherever a mixture of fodder would be expedient, or meal, &c., is to be used, or working animals are to be provided for, the advantage of cutting will be found to repay the expenses ten fold.

In times past, the writer has had some experience in feeding stock, and has practiced various modes with a view to economising food and cost. During seasons of scarcity of hay, a course like the following was adopted with advantage. Good hay and straw, (oat and barley straw are preferable, but wheat and rye straw were often used,) were cut together in equal parts. Chaff of wheat or oats was sometimes used instead of straw. This fodder was mixed with corn meal, at the rate of two quarts of meal to the hundred of fodder. First a layer of six or seven inches of the straw and hay was thrown into a large box, spread over the bottom, and moistened with hot water—then the meal was scattered over it, and afterwards well mixed with forks. Other layers were prepared in the same way, until enough was ready for twenty head of cattle for twentyfour hours. It was made the object to give each grown animal, (cow or ox,) twentyfive pounds of the cut straw and hay every twentyfour hours—that is, each was allowed twelve and a half pounds of hay, the same quantity of straw, and a pint of meal per day. Younger and smaller stock was fed in proportion. Cows giving milk, and oxen when working, had the meal increased—giving in such instances, two to three quarts per day. Sometimes rye meal, shorts, and occasionally oil-cake were used, either by themselves or in connection with the corn-meal; endeavoring to use about the relative quantities of each which would afford the same amount of nutriment; but as we had no definite standard, we gave as nearly as practicable equal weights.

Not the least waste attended this course of feeding, and we found stock to do well on it. Though not fat, they were in good trim, and their coats got into fine order early in spring, so that they went to grass in excellent condition.

In feeding potatoes or other vegetables to store stock, where the quantity does not exceed half a bushel per day to each grown cow or ox, we have usually given them at one feed in the morning, after the first foddering of hay.

Col. Jaques, of Massachusetts, who is known as an economical feeder of stock, adopts the following plan, which we copied sometimes since from notes furnished by him:

"For 30 cows, cut with a machine 30 bushels for one feed; one-third common or English hay, one-third salt hay, and one-third rye or barley straw; add 30 quarts of wheat-bran or shorts, and ten quarts uf oat and corn meal moistened with water. One bushel of this mixture is given to each cow in the morning, and the same quantity at noon and in the evening. In addition to this, a peck of mangel wurtzel is given to each cow per day. This mode of feeding has been found to produce nearly as much milk as the best grass feed in summer."

Stock must not be too much stinted in their food in the fore part of winter, nor should an attempt be made to keep them at once on the poorer kinds of fodder. In the colder weather of January and February their appetites will be sharper, and then the poor fodder will be eaten to best advantage. We said their food should not be stinted in the beginning; the reason is, that if they are brought low in flesh in the first of the winter, they cannot stand the inclemency of the weather so well, and they rapidly fail towards spring. Hence if any *pinching* must be done, it had better be deferred to the last end of the season of feeding, as relief may be shortly expected from the growth of grass. The greatest regularity should be observed in feeding—always giving the food as near as practicable at certain fixed times. But no food should at any time be given to be left—all should be eaten to the last straw which is eatable. Still, substances which are really innutricious—such as the large sour butts of corn-stalks and the woody stems of weeds and coarse herbage—should not be given to stock with the expectation that they will be eaten and benefit be derived from them.

The importance of shelter to stock must not be overlooked—it having been fully demonstrated that warmth is equivalent to food. The heat of the animal system is kept up in the same manner as flame is supported—that is, by an union of carbon and oxygen. The animal derives its carbon from the food, which, having undergone digestion, is taken up by the blood and thence conveyed to the lungs, where by the act of respiration, it is united with a portion of the oxygen of the atmosphere, and heat is produced. Exposure to a low temperature dissipates the animal heat, just as heat is driven off from any other body similarly situated. It is obvious that the natural temperature of the body must be sustained or the animal will perish. As carbon is the only material by which this heat can be furnished, that substance must either be supplied to the blood from the fat and muscle already formed, or the blood must obtain it through the medium of food. If the food is deficient, the supply must be made up from a waste of the bodily parts; and the consequence will be loss of flesh and weight, which if long continued may cause the death of the animal, either by finally cutting off the source of heat, or so weakening the system that it yields to the attack of some malady. To sustain the animal in proper condition, requires a supply of food proportioned to the degree of cold to which it is exposed; and it is therefore obvious that by avoiding exposure to cold, we save food.—*Albany Cultivator.*

Famine in Ireland.—A letter from Dublin to the New York Tribune says:

"Ere this letter shall have reached you, the *famine will actually have commenced*, and whatever may be done in the interim here to avert its evils, immense suffering must ensue. Could I detail to you the many cases of wretchedness and want daily coming under our observation, I believe it would rouse our country to immediate and energetic action. But I need not detail them. Is it not enough that *six millions of human beings* in Ireland and England are within *eight weeks of* STARVATION? But I cannot pursue the awful subject. Help! oh, help! ye who can.' Fathers, mothers, sisters, brothers—friends of humanity, children of a common Father, YOUR BROTHERS AND SISTERS ARE STARVING! Here I leave the entire matter, mournful as it is, for the profound and solemn consideration of the American People; and may God open their hearts to do unto others as they would under reversed circumstances, have others do to them."

A FOURTH OF JULY TOAST,—The memory of the man, that owned the land, that raised the corn, that fed the goose, that bore the quill, that made the pen, that wrote the Declaration of Independence!

A CHAPTER ON APPLES.

The great advantage of fruit raising to the farmer, has been often commended through our columns. It is not our intention to enlarge upon its general merits at present, but to confine what we have to say to the subject of apples alone.

The apple is, beyond all question, the king of fruits; as wheat and the potato are of grain and roots. In some one or more of its varieties, it keeps throughout the three hundred and sixtyfive days of the year; and long after the earliest juneeating and sweet-bough with their glossy sides and fragrant odor, are offered in the market, the piles of smooth greenings and pippins, and rough golden-coated russets, with all the firmness and substantial merits of veterans of '76, are tempting the eye and olfactories of every beholder by their plump and but just matured perfections. It is to this quality of enduringness, that much of the merits of the apple are due. But much more it may justly claim, in its luscious flavor and healthful influences, and its peculiar adaptation to so large and varied uses. Beside the thousand-and-one varieties of dishes of which it forms the sole, principal, or a subordinate part in the economy of the skilful housewife, it contributes greatly towards the interest of the farmer profits from its sale, and its use as food for his stock.

The profit from feeding the surplus of an extensive orchard of fine fruit to stock (for fine fruit is as much better for animals as it is for their owners,) has become an item of careful estimate, since the nearly general abandonment of the wasteful, sottish system of cider-making. It was the rule, we believe, that 8 to 12 bushels of apples would make one barrel of cider, and 8 to 12 barrels of cider, one barrel of cider brandy. The former was made to the halves, while, perhaps, 2 gallons of the latter might be returned as a full equivalent for a barrel of the former. Two gallons of miserable liquid poison, under the name of cider brandy, was, within less than a generation since, the product of 8 to 12 bushels of apples! Let us see how the case stands by the touchstone of figures. Eight bushels of good apples (and it is cheaper raising good apples than poor,) are worth in an average of seasons, 37 1-2 cents per bushel, in the orchard, or $3 for the whole; while the two gallons of brandy would be worth about the same price of whiskey, say 50 cents—difference in favor of selling the apples, or using them for some appropriate purpose, six to one. Verily, the present age has improved some in pocket, as well as morals.

The value of apples, however, for feeding to stock, is not equal to that for selling, whenever a good market is within reach. The early droppings from the trees should be invariably fed to stock; as besides their general worthlessness for other purposes, from their immaturity, they frequently contain worms, which their consumption by stock effectually destroys. The most economical way of providing for this, is to allow swine to run at large in sufficient numbers to consume all the first droppings. These, with the offal of the dairy, and a good clover pasture, with a trifle of meal, thoroughly soured with the whey or slops, will put *a good breed* of hogs into fine condition, *if kept out of the road*, by the time peas, potatoes and corn are sufficiently matured to begin their fall feeding. If there should be any surplus of apples, beyond what may be more profitably disposed of, these may be fed to the fattening porkers, either raw or cooked, with certain advantage. The exact equivalent in grain or roots, for pork or beef making, has not been ascertained with sufficient accuracy to be here stated, but that they stand high in fattening properties, is beyond a doubt: while the quality of meat they produce, is of the highest flavor.

Sheep may be substituted for swine in ranging through the orchard and picking up the diseased and immatured fruit. They will not hurt store sheep either in flesh or fleece, but they are more particularly profitable for such as are intended for mutton. A run in the orchard is an excellent preparation for heavier feed at a later period in the season, and richer or more highly flavored mutton cannot be produced than is afforded from such as have this food continued to them, till ready for the shambles.

Milch Cows thrive on them exceedingly, though they should never be allowed to run among the trees, from their injuring the limbs, and their liability to be choked in taking the apples from an elevated position. The milk from cows so fed, is noted for its richness and delicious flavor. For working cattle and such as are intended for beef, they are nearly as valuable.

Horses are also exceedingly fond of apples, and few kinds of stock are more benefited by their use. They are a full substitute for grain, with hay, when not too hardly used, and it has been found from long experience and careful observation, that their health is better when so fed; their coat is smoother and more glossy; and that they are equally spirited.

The quality of apples has much to do with their value; though probably not more than that of roots and grain. Such kinds should be selected for feeding, if that be the object, which are, as a general rule, the most profitable for sale; as they will be found to combine the best flavor with the most substance. Sour apples have been proved from careful experiments, to be equally nutritious for stock as sweet, but it must be remembered, that they soon set the teeth on edge, and cannot be continuously fed in considerable quantities, with advantage to the thrift of animals. Boiling would remedy this objection, but it is more easily obviated by alternating sweet with sour; or if an orchard is to be set out or grafted, expressly in reference to this object, sweet apples may almost entirely predominate.

Poultry comes into the long list of consumers of the apple orchard; and no less good does it do them, than the other tenants of the farm. Of apples, of a soft, delicate, delicious pulp, we have had more than a peck per day consumed by a small flock of hens and chickens. Turkeys, ducks, and geese, are equally fond of them.

Some prejudice has been created against the use of apples for stock, from the fact, that when a hungry cow happened to break into an orchard and filled herself to repletion, a fever ensued, and her milk dried up. The same rule would hold good against allowing a horse a ration of grain, because one had died from an unstinted feed of corn. The true course is, to commence feeding in small quantities, and gradually increase the allowance till put on full rations.

When the apple is fed to the larger animals, hay and grass should always accompany it; and when fed to hogs, fresh clover or grain should be added. When thus judiciously managed, we doubt if the production of roots for stock feeding, will compare in economy, with that of raising apples for a similar purpose. It is true that they are sometimes cut off by late frosts, and are not vegetables and grain equally liable to injury, and disappointment of the husbandman? In conclusion, we can offer no better advice to our readers, than to urge them to plant as extensive orchards as they can manage to advantage, of the choicest fruits they can select; and whether intended as an investment of their money, as food for their families, or domestic animals, or as an inheritance for their heirs, they can make no more appropriate bestowment of their time and wealth.—*Amer. Agriculturist.*

EXPERIMENT ON DISEASED POTATOES.

[We take the following from the London Gardeners' Chronicle:]

"Knowing the antiseptic qualities of chloride of lime, it struck me that it might prove efficacious in stopping the rot. I had a good-sized washing-tub half filled with water, to which I added half a pint of the chloride—and this mixture may be used again and again—and as many potatoes put in as the water would cover, and left in for 24 hours at least; they were taken out much hardened and whitened, and with an appearance most promising as to the probability of their untainted parts still keeping sound. Time, however, must prove this; but I have no doubt that the disease is effectually checked by this treatment.

Allow me to add, that I sincerely trust that this Providential visitation may have the happy effect of counteracting that forgetfulness of the unmerited bounty of the Giver of all good, which I fear is not uncommon, from the uninterrupted and abundant supplies with which Divine goodness has so long furnished us; and that with a deeper sense of the utter dependance of man, and with livelier gratitude for the unceasing kindness of our gracious Creator, may be used the expressive prayer of our litany: "That He would ever give and preserve to our use the kindly fruits of the earth." Had the evil also befallen our corn (grain) crops, the calamity would indeed have been fearful. And as a thank-offering for what has been so mercifully preserved to us, let me express a hope that as much as possible will be done by all who have it in their power, to alleviate the extra suffering which, I cannot but fear the poor will experience during the coming winter.—*Vicar of Mountnessing, Essex.*

LIME AS MANURE.

The addition of lime to the land has, in nearly all well cultivated countries, extensively prevailed at every period of authentic history. In Europe its use has been universal, and everywhere the same observation has been commonly made, and has become a proverb in almost every language. "Lime," says the proverb, "enriches the fathers, but impoverishes the sons." Laid on in repeated doses, and for a length of time, the luxuriant crops it raises at first, gradually fall off, till at length, even with the stimulus of larger doses, the land refuses to be excited.

A like result has been observed of late years from the application of gypsum, nitrate of soda, common salt, and saltpetre. Their good effects were apparent for a certain number of years, but they gradually ceased to act, and the land was afterwards believed to be even weaker and less productive than before.

How are these results to be explained? Can this apparent exhaustion be prevented? Can it easily be remedied? Is it a necessary consequence of the use of lime, and of the other substances mentioned? Is the manure or the farmer to blame

for the results? Let us see. The plant carries away from the soil say ten substances. The soil is deficient in *one* of these, and the plant cannot thrive. The lacking ingredient say, is lime, or soda. You add it, and the crop grows luxuriantly. Rejoiced at this result, you add more lime, and your crops still grow well—for it requires the addition of 300 or 400 bushels to an imperial acre, to add only *one* per cent. of lime to a soil which is 12 inches deep. But after many crops, the lime at length ceases to benefit the land, the crops are even smaller than before the lime was first added, and the farmer is at a dead stand.

Now, what has he been doing all this time? He has been adding *one* thing only in his lime—while he has been carrying off *ten* things in his crops. Is it any wonder, then, that after a lapse of years, the land should become poor in one or more of the other nine? The iron-smelter throws into his furnace his ore and his coal, but he gets no metal until he adds lime also. The lime being added, he can draw the liquid metal. He adds more lime, and procures, probably, more iron. But he soon finds the lime does no further good: he has melted out all the *iron*: the stimulus of the lime has no effect. He must add *ore* and *coal* again, and then he will obtain his periodical flows of metal. So it is with the soil. The farmer who hopes by the continual addition of *one thing alone*, to make his land produce continual good crops, hopes and acts against reason. It is *his* fault that the land has become exhausted, and the cure is in his own hands. Lime, therefore, *does not* necessarily "impoverish the son." But *any* treatment will ultimately make the land poorer, which does not return to the soil *all the things which the crops have carried off*, and at least in equal proportion.—*North British Review.*

[The preceding remarks are very sensible and correct upon the point to which they apply relative to the use of lime. But we suspect a case rarely occurs in this country, of the exclusive use of lime as a manure for any crop; hence the cases must be rare where such effects from its repeated use, take place, as those above described. Lime cannot act as an impoverisher of the soil, if judiciously used—and any farmer with a thimblefull of sense, we should suppose, would know, that if he applied *nothing but* lime as manure for his soil, he would be pursuing an *injudicious* course. The writer asserts a most important truth when he says, "*any* treatment will ultimately make the land poorer which does not return to the soil all the things which the crops have taken off, and at least in equal proportion;"—and when this truth shall become generally recognized by farmers, in practice, an important approximation will have been made towards perfection in agriculture.]

WOOD AND WOODLANDS.

The fore part of the winter is the best time for cutting and securing the year's wood, as well as for clearing off the forest preparatory to cultivation. Before snow falls, or while there is little on the ground, it is much more convenient and pleasant working in the woods—the trees can be readily cut close to the ground, the small limbs and brush can be easily separated from the wood and piled by themselves, and the workmen are not obliged to plunge their hands in cold snow to pick out the wood.

Few things are of more consequence to the farmer than a judicious management of his woodlands; and yet nothing is generally more neglected. Such, in fact, has been the inattention to this subject, that a scarcity of wood and timber has occurred in many districts naturally provided with abundance.

After having cut off the old, or "first growth," as it is called, fires have in some instances been allowed to sweep over the ground with such intensity as not only to prevent the stumps from sprouting, but also to destroy most of the seeds of trees contained in the soil—thus leaving the lands comparatively a barren waste. Beside this, cattle are often allowed to range at will, and are indeed sometimes compelled to obtain their living by browsing on the sprouts and young trees, which permits only a scrubby, worthless growth.

It has been sometimes recommended to cut out old decaying trees first, but the practice is attended with several objections, and we believe experience has proved that the best course is to cut off the entire growth, clean and smooth. In attempting to cut out the old trees, a great many of the smaller ones are inevitably broken down and spoiled, and as the growth is always kept uneven, the greatest quantity is prevented from accumulating on the ground at once.

Where fuel is the object, the course now pursued in those sections where woodlots are turned to the best account, is, to cut everything close and clean once in every fifteen or twenty years. The lots are protected as much as possible against fires, and cattle are kept entirely off. Lands producing hard wood are in this way made to yield from fifteen to twenty cords of excellent wood per acre at each cutting—giving a growth at least equal to a cord per acre annually.

On cutting the primitive or old growth from a lot, the succeeding growth cannot be relied on from sprouts—especially if the trees were much on the decline. In such cases we have usually to wait for a generation to come from seed, which generally takes a considerably longer time than is required where a thrifty growth is cut; because in the latter case the stumps sprout vigorously, and as great a growth is obtained in one year as ordinarily takes place from seed in four years. This is one of the great advantages of frequent and clean cutting—a rapid, even, and thick growth always springs from the stump, and we have never to wait for the slow and somewhat uncertain process of a renewal from seed.

Trees had better be cut close to the ground, whether the lot is intended to grow up again or to be cleared. When there is a great depth of snow on the ground, it is difficult to cut trees closely, and we sometimes see the stumps from two to three feet high; but we think sufficient care is not generally taken to cut low. The best of the wood or timber is generally next the ground. If the land is to be cleared, the plow and the harrow can be made to work much nearer the stumps if they are cut close to the ground, and if the lot is intended to grow up, the suckers or sprouts grow much more vigorously from low than from high stumps. If the stumps are left high, the sprouts often come out on the sides, or near the top, and the winds break them off, or the stumps rot and they perish.

These remarks, of course, apply to hard wood trees: resinous ones never start from the stump.—*Albany Cultivator.*

The Germantown (Pa.) Telegraph states that an apple tree near that place, has repeatedly borne over 100 bushels of apples at one crop.

CAPE COD FARMING.

The farm of J. H. Knowles, of Eastham, is one of the best cultivated and most productive in the country. His homestead contains twenty acres, two of which are covered with salt-works. Besides this, he has two acres of swampy land, used for pasture, and salt meadow that produces annually about twelve tons of hay. The soil of his land is mostly a sandy loam, and under his management is very productive. The past season he had eight acres under cultivation. The following statement of the amount raised thereon was handed to us by a member of the Agricultural Society, who visited Mr Knowles' farm, to examine it for the purpose of making a report thereon, and may be relied on as entirely accurate.

Produce of eight acres under cultivation in 1845:

90 bushels of corn,
85 do. of rye,
20 do. of oats,
100 do. of potatoes,
150 do. of beets and other roots.

On the remaining twelve acres, he cut twelve tons of English hay. From one acre—

At the first mowing, 51 cwt.
At the second do. 30 " 66 lbs.

or 4 tons, 1 cwt. 66 lbs. of hay from one acre, and he has pastured, this year, fifteen head of cattle and two horses.

This statement of the production of a small Cape Cod farm, may seem almost incredible, but the fact that Mr Knowles manures highly, and is an excellent cultivator, explains the secret of his success.

Besides the manure which Mr Knowles has made in his barnyards and styes, the present year, he has manufactured 130 cords of compost manure, by stacking loam, muscles, mud, rock-weed, peat and sea-weed, and mixing therewith one cask of lime.

We profess to have some knowledge of the science of agriculture, and have found by experience that the only method by which a profit can be obtained from tillage land, is by manuring highly and cultivating well. If double the usual amount of labor and manure is expended on a given quantity of land, the crops will generally be double in amount, and the land will be left in a much better condition.

Last year we put out a piece of land on a lay. The usual quantity of manure was put on, and it was tended as well as land usually is that is put out "to halves." No exact account was kept, but we do not believe that our tenant realized fifty cents a day for his labor. This year we took one-third of the same land, put on it as much manure as was last year put on the whole, plowed it deeply and cultivated it well during the season, and one-half of the crop has amounted to over two dollars a day for every day's work expended in the cultivation.

We have tried the old method of cultivation to our perfect satisfaction, and find that by hiring the labor done, we cannot get a new dollar for an old one; but by practicing on the improved system, we believe the crops will pay all the expenses of cultivation and leave something for rent of the land.—*Yarmouth Register.*

A Good Conscience.—A good conscience is the finest opiate. Sweet are the slumbers of him who can lie down on his couch and review the transactions of every day without condemning himself.—*Knox.*

NEW ENGLAND FARMER,
AND HORTICULTURAL REGISTER.

Edited by Joseph Breck.

Boston, Wednesday, Dec. 17, 1845.

CULTIVATION OF POTATOES.

Mr Breck—Dear Sir,—I observed in the last number of the Farmer, an account of the plan by which Mr Widney, of Ohio, successfully cultivated his potatoes. It augurs well when even one person has the fortitude to step beyond the barriers of any ancient system which may have nothing to recommend it but its antiquity; and it must be no small degree of pleasure to such person, if his plan prove successful; for, besides the pecuniary advantage to himself, it saves him from the ridicule of the friends of "the good old way,"—and they are neither few nor far between.

In reading Mr W.'s account, a thought suggested itself to my mind to give you an account of a plan which I have practiced with success; but I am not the patentee, nor do I know to whom the honor of originating it belongs: all I know is, that it was the common mode of cultivating potatoes in Scotland, twenty years ago, and I did not learn that it was *new* at that time.

The plan is as as follows:—After the ground is properly prepared for planting, furrows or trenches, or whatever you please to call them, are opened with the plow, into which the manure is put, and the potatoes planted either whole or cut. If cut, they may be planted from 4 to 10 or 12 inches apart in the furrow—if whole, from 12 to 18 inches apart. The distances should vary according to the fertility of the soil and the quantity and quality of the manure used, and also according to the kind of potato and the purposes for which they are intended to be raised. The distance between the furrows or drills (as they are called,) should not be less than 30 inches. After the potatoes are planted, they are covered with the plow, and in a dry season it is a good plan to roll the drills in order to prevent the moisture from escaping, but in a wet season rolling should be omitted. By compressing the earth about the seed, it vegetates quicker—a thing of the utmost importance in the present diseased state of the potato plant. If any doubts are entertained of the vegetative powers of the seed, it should be planted when the land is in a moist state. In very dry weather, the morning and the evening is the best time, or if a damp day occurs, it should be taken advantage of for that purpose, and in all cases the seed should be covered immediately after planting. For a potato with weak powers of vegetation when planted under such circumstances, and on well fermented manure, will grow well—when the same potato, if planted in dry weather, and on unfermented manure, and exposed for some time to the influence of a hot sun, would rot before it would vegetate. And that is perhaps one reason why one portion of seed grows well, while another portion, in every respect the same, does not vegetate at all, or comes up so weak that the plants are entirely useless for producing a crop. (Exposing potatoes to the sun for a few weeks in the fall, has a good effect in producing quick and powerful vegetation in spring. I have tried the experiment with perfect success.) When the potato plants are about an inch above ground, the plow is run along the drills or ridges, and the plants are covered in the way that Mr Widney speaks of, and the deeper they are covered the better. After this operation is performed, a light harrow is passed over them, but care should be taken to keep it moving lightly, by having the two ends of a rope fastened to the hind bar of the harrow, the ends of the rope being far enough to enable the person who attends it, (he having the bend of the rope in his hand,) to lift the harrow all off the ground at once, when it meets with any obstruction, or becomes filled with weeds or any other material. I prefer a harrow so light and the teeth so fine as will allow of its being passed over them two or three times, as that will leave the ground in a more pulverized state, and the weeds (if any) will be better shaken and more exposed to the sun than if a heavy harrow had passed over only once. It should never be allowed to drag, but should be kept playing lightly on the surface of the drills or ridges, and by using double reins on the horse, one person can easily manage both the horse and the harrow. The best kind of harrow for the purpose is one with curved bars, (after the form of the felloe of a cart-wheel,) with the teeth longer where they enter the side of the drill, near the bottom, than those which enter it on the top. After this operation has been properly performed, the ground is left in a fine pulverized state, and as clear of weeds as when the potatoes were planted.

When potatoes are early planted and weeds begin to show themselves at an earlier period than that mentioned above, the operation should be performed twice, but if it requires to be performed only once, I should defer it until the plants are above ground, as by so doing, the weeds are destroyed, and before they can start again, the potato tops will cover the ground, and the weeds will therefore only have a sickly growth.

After the plants are three or four inches high, a small plow, (a light subsoil plow answers best,) should be run as near as possible to the plants, and the earth thrown from them. If a subsoil plow or any plow without a mould is used, (which are the kinds best adapted for the purpose, for if the plow has a mould it cannot be let in deep, as it would throw the earth on the opposite row,) it should be let in as deep as possible, both on account of the present and after crops. If the ground has been suffering by drought about the time the potatoes are in this stage of their growth, I should prefer having them laying in the state last described, just at the time the rain fell, as the moisture would get immediately to their roots, and if the earth is laid up to the plants in a damp state, it will retain the moisture about the roots for a considerable time, especially as the tops will shade the ground, and to a certain extent prevent evaporation.

After the earth has been thrown away from the plant, the cultivator should be run in the space between the rows to level the ground and to shake and expose the weeds. After this operation has been performed, the plow should be run along the centre of the space between the rows of plants, and the finely pulverized earth laid up to them; but care should be taken to keep the drill or ridge flat and wide on the top, for the purpose of receiving the moisture of dews and rains. When the potatoes are farther advanced, the plow may be run through the same track as before: it may not be necessary to lay up any earth this time, but only to renew the surface of that which has been previously laid up, in order that any weeds which were making their appearance, might be destroyed, and also that by breaking the crust, which had become hard on the surface, evaporation and absorption will go on more freely. And it may even be necessary to run the plow through a third time, for the above reasons.

The above system is as applicable to the cultivation of potatoes planted in hills as to those planted in drills, rows, or ridges, or whatever you may please to call them. The plow can be run at right angles in the spaces between the hills, as practiced by Mr Widney.

The plan I have described is not so simple and easily comprehended, or practiced, as that of Mr W., and is therefore not so likely to be adopted. But those who have fortitude enough to leave the ancient land of *Hoefield* and travel as far as Mr W.'s system, and find it successful, may, perhaps, screw up courage enough to proceed a few steps further into the depths and mysteries of cultivation, and perhaps find out a plan far surpassing any that has yet been discovered.

By practicing such a system of cultivating potatoes, the ground is stirred deeper and is better pulverized, and lays looser about the plant, and also kept cleaner and left in a superior state of cultivation for future crops, than it could have been under the hoe system of culture, however well performed. And if the plan is properly executed, the hoe will not be required, except where the land, by previous mismanagement, has been well seeded down to weeds, and even in that case, it will only be necessary to use it between the plants in the hills or drills.

I have seen and heard of a great many methods for raising (or *digging*, as the term is here) potatoes, but the best which I know of, is to run a double-mouldboard plow through the centre of the drill or hills, after the tops have been thrown aside, and have one or two prongs like harrow-teeth, attached behind the moulds, to harrow the furrow which the moulds throw out: by this operation, and by harrowing the ground afterwards, the potatoes can be taken tolerably clean out. Another plan is to run the cultivator between the drills or hills, and take part of the earth away on each side, and then take out the middle portion with a pronged hoe. The latter plan will probably take the potatoes out cleanest. But such implements can only be successfully used on land that has been kept clear of weeds, or has had the long ones pulled before the commencement of the operation; for the plow or cultivator would be choked in such fields as are not unfrequently met with, in which weeds are so prominent objects, that it would be difficult for a stranger to determine whether anything else than weeds is to be found.

Respectfully, yours,

ALEX'R BICKETT.

Lowell, Dec. 1, 1845.

☞We hope to hear from our intelligent correspondent on other processes of cultivation pursued in his native country, whose farmers have a world-wide celebrity for their economical and thrifty management in the operations of husbandry.

☞The favors of "M. A.," "G. B.," and "J. H. D." for which we are obliged, shall appear in our next.

Mass. Horticultural Society. *Saturday, Dec.* 6.—Capt. J. Lovett exhibited very superior Pears, of the following varieties—Beurre d'Aremberg, Easter Beurre, Glout Morceau, Winter Nelis, and Lewis; also, one specimen of the Passe Colmar, of the second crop. Minister Apples, fine specimens.

For the Committee, P. B. Hovey, Jr.

Albany Cultivator.—The proprietor of this popular magazine of agriculture, announces in the Dec. No., which closes the volume, that he has re-engaged for the coming year the editorial assistance of Sanford Howard and J. J. Thomas, Esqrs. Both these gentlemen are known to us as sound, practical, and instructive writers, and their abilities, in conjunction with the aid of its numerous contributors, are a sufficient guarantee that "The Cultivator" will not suffer any diminution in the popular estimation or patronage.

☞The year is fast drawing to a close. Prepare for a settlement of your accounts—and pay the printer *first*.

THERMOMETRICAL.

Reported for the New England Farmer.

Range of the Thermometer at the Garden of the proprietor of the New England Farmer, Brighton, Mass. in a shaded Northerly exposure, to the week ending Dec. 14.

Dec. 1845.	7 A.M.	12, M.	5, P.M.	Wind.
Monday, 8	23	34	30	E.
Tuesday, 9	32	33	31	N. E.
Wednesday, 10	28	30	23	N. W.
Thursday, 11	15	15	11	N. W.
Friday, 12	1	10	10	N. W.
Saturday, 13	5	17	16	N. W.
Sunday, 14	21	46	35	.S E.

BRIGHTON MARKET.—Monday, Dec. 15, 1845.

Reported for the N. E. Farmer.

At market 625 Beef Cattle, 100 Stores, 400 Sheep and 525 Swine.

Prices.—*Beef Cattle*—We quote to correspond with last week. Extra $5,25. First quality $4,75 a $5,00. Second quality $4,25 a $4,50. Third quality $3,50 a $4,25.

Stores—No Sales noticed.

Sheep.—Dull. Sales from $1 to $2 25. A few extra Cosset Weathers $5 each.

Swine.—Two lots small Shoats 3 1-4 and 4 1-4. Two lots large Shoats 3 1-2 and 4 1-2. At retail from 4 to 5 1-2.

WHOLESALE PRICES CURRENT.

Corrected with great care, weekly.

SEEDS. Herds Grass, $2 00 a 2 25 per bushel. Red Top 50 to 60 cents. Clover—Northern, 10 to 11c.—Southern, 9 a 10c. Flax Seed. $1 50 per bushel. Lucerne, 33 c. per lb. Canary Seed, $2 25 a 2 50 per bushel. Millet, 1 75 to 2 00

GRAIN. The Corn market for the week past has exhibited no buoyancy or spirit.

Corn—Northern, new, bushel 00 a 00—Southern, round yellow, 00 a 00—Southern flat yellow, 78 a 80—do. do. white 73 a 77—do New Orleans, 70 a 75—Barley 00 a 00—Rye, Northern, 90 a 95—do. Southern, 00 a 00—Oats Southern, 46 a 48—Northern do. 00 to 00—Beans, per bushel 1 75 a 2 00.—Shorts, per double bush. 50 a 55—Bran, 00 a 40.

FLOUR. There was but little disposition at the close of the week to operate, either by buyers or sellers; both seem inclined to wait the arrival of the next steamer.

Baltimore, Howard Street, 4 mos. cr. new, $6 37 a 6 50—do. wharf, $0 00 a 6 25—do. free of garlic, $0 00 a 0 00—Philadelphia do. 4 mos. $0 00 a 0 00—Fredericksburg, low l'd new $6 12 a 6 25—Alexandria, wharf, 6 12 a 6 25—Georgetown, $6 25 a 6 50—Extra do. 0 00 a 0 00—Richmond Canal, $6 25 a 0 00—do. City, $7 00 a 0 00—Petersburgh, City, $0 00 a 0 00—do. Country $0 00 a 0 00—Genesee, common, cash, $6 37 a 6 50—do fancy brands, $6 62 a 6 75—Ohio via Canal, $6 00 a 6 50—do do New Orleans, cash $0 00 a 0 00. Rye, $0 00 a 5 00—Indian Meal in bbls. $4 00 a 4 25.

PROVISIONS. There have been no sales of any great importance during the past week.

Beef—Mess 4 mo. new bbl. $8 75 a 9 25—Navy—$7 73 a 8 50.—No. 1, $0 00 a 0 00—do Prime $5 50 a 0 00—Pork—Extra clear 4 mo. bbl. $15 00 a 15 50—do Clear $14 50 a 15 00 do. Mess, $13 50 a 14 00—do Prime $10 75 a 11 00—do Mess from other States,— a — —do Prime do do $0 00 a 0 00 do. Cargo do. 0 00 a 0 00 —Clear do do $00 00 a 00 00—Butter, ship'ng, 12½ a 14—do store. uninspected, 13 a 15—do dairy, 15 cts. a 18—Lard, No. 1, Boston ins. 8 a 9—do South and Western, 8 a 8½—Hams, Boston, 8 a 8½—Southern and Western, 8 a 9—Cheese, Ship'g and 4 meal 6 a 8—do new milk, 7½ a 0.

WOOL. Duty. The value whereof at the place of exportation shall not exceed 7 cts. per pound, 5 per cent. ad-val. All whereof the value exceeds 7 cts. per pound, 40 per ct. ad. val. and 3 cts. per pound.

There has been a fair demand for both pulled and fleece Wool, during the past week, and sales to a considerable extent have been made.

Prime or Saxony Fleeces, washed, lb. 40 a 45 c.—American full blood do 37 a 40—Do. 3-4 do 34 a 35—Do. 1-2 do 32 a 33 -1-4 and common do 29 a 31 — Smyrna Sheep, washed, 20 a 22—Do. unwashed, 10 a 15 — Bengasi do 6 a 12—Saxony, clean, 00—Buenos Ayres unpicked, 7 a 10—do. do. picked, 10 a 14—Superfine Northern pulled lamb 33 a 38—No. 1 do. do. do. 30 a 32—No. 2 do do do 23 a 25—No. 3 do do do 14 a 17.

HOPS. Duty 20 per cent.

1st sort Mass. 1844, lb. 25 a 00 ; 2d do 0 a 0.

HAY, 20 to 21 per ton—Eastern Screwed $17 to 18.

EGGS, 15 to 18.

FARM FOR SALE.

A Farm in Medfield, formerly owned and improved by Capt. William Peters. Said Farm is pleasantly situated near the centre of the village, upon the main road to Hartford, and is passed by several daily stages. It consists of about 65 acres of excellent Land, under good cultivation, is well watered and fenced, and of remarkable easy tillage. The house is large and most thoroughly built, and the barns and other out buildings are convenient and in good repair. There are many Fruit Trees of the best kinds, most of which are grafted and in full bearing.

Also, a two story Dwelling House, in good repair, with an excellent garden and fruit trees nearly opposite the above, and a large Pasture and an Orchard within a short distance.

The whole or part of the above estate will be sold on reasonable terms.

For further information apply to the editor of this paper, to Elias Phinney, Esq., Lexington, or to the subscriber on the premises. CHARLES C. SEWALL.

Medfield, Sept. 23, 1845.

Guano! Guano!

Just received and for sale in lots to suit purchasers, 20 tons African and South American Guano, of superior quality, the best ever brought into this market. The African, which is part of the cargo of the brig Samos was analyzed by one of the first chemists of this country, and pronounced to be of the first quality; it has been fairly tested by many of the farmers and gardeners in the vicinity of Boston, and has fully equalled their highest expectations. We can fully recommend the South American, which has also been carefully analyzed, and found to be a splendid article, and very superior, being free from stones and hard substances. For sale by the ton, bbl. or bag. Orders addressed to JOSEPH BRECK & CO., 51 and 52 North Market street, will be promptly attended to.

Boston, March 25, 1845.

SEEDS AND TOOLS.

JOSEPH BRECK & CO. having received a full and general assortment of FIELD, GRASS, GARDEN and FLOWER SEEDS, worthy of cultivation, confidently recommend them as being pure and of the first qualities, unmixed with other varieties; they have no hesitation in saying that their collection of Seeds is the best, and of the greatest variety ever offered for sale at any establishment in the U. States.

AGRICULTURAL BOOKS of all kinds, constantly on hand.

AGRICULTURAL AND GARDEN IMPLEMENTS of all kinds, among which are the following, viz:—1000 Howard's Patent Cast Iron Ploughs, 200 Common do. do, 200 Cultivators, 100 Greene's Straw Cutters, 50 Willis' do. do. 100 Common do. do, 100 Willis' Patent Corn Shellers, 50 Common do. do, 200 Willis' Seed Sowers, 50 do. Vegetable Cutters, 50 Common do. do., 200 Hand Corn Mills, 200 Grain Cradles, 100 Ox Yokes, 1500 Doz. Scythe Stones, 3000 do. Austin's Rifles, 100 doz. Cast Steel Shovels, 150 do. Common do. 100 do. Spades, 500 do. Grass Scythes, 300 do. Patent Snaiths, 200 do. Common do., 500 do. Hay Rakes, 200 do. Garden do., 200 do. Manure Forks, 300 do. Hay do. 500 Pair Trace Chains, 100 do, Truck do. 100 do. Draft do, 500 do. Tie up do, 50 doz. Halter do, 1000 yards Fence do, 25 Grind Stones on Rollers.

JOSEPH BRECK & CO.,
N. E. Agricultural Warehouse and Seed Store, 51 and 52 North Market Street. Boston.

ESSAY ON GUANO.

For sale at Nos. 51 and 52 North Market Street, Teschemacher's Essay on Guano,—describing its properties and the best methods of its application in Agriculture and Horticulture, with the value of importations from different localities; founded on actual analyses, and on personal experiments upon numerous kinds of trees, vegetables, flowers, &c. Price 25 cents. JOSEPH BRECK & CO.

Boston, Nov. 4.

HORTICULTURAL TOOLS.

A few cases of superior Horticultural Tools, for gentlemen or ladies' use For sale by JOS. BRECK & CO. 51 and 52 North Market Street.

HERDS GRASS OF EXTRA QUALITY.

The subscribers have received a few tierces of extra fine *HERDS GRASS SEED*, perfectly free from all foul seed, which they can confidently recommend to farmers for August sowing. Also, their usual supply of good *GRASS SEED*, of all kinds. JOSEPH BRECK & CO.

Nos. 51 & 52, North Market street, up stairs

GEDDES'S HARROW.

This excellent implement, considered a great improvement on all other kinds, is for sale at the N. England Agricultural Warehouse, 51 and 52 North Market street, by

May 21. J. BRECK & CO.

BOUSSINGAULT'S RURAL ECONOMY.

Boussingault's Rural Economy; Price $1,75. Downing's Book of Fruits; price $1,75. Stable Keeper's Companion; price $1,00. Also, a general assortment of *AGRICULTURAL WORKS.*

Boston, Sept, 10, 1845. JOS. BRECK & CO.

MARTIN'S MASSACHUSETTS PREMIUM EAGLE PLOWS.

The subscribers have for sale at their extensive Agricultural Warehouse, No. 51 & 52 N. Market street, *MARTIN'S MASSACHUSETTS PREMIUM IMPROVED EAGLE PLOWS.*

Mr. Martin's Plows combine new and important improvements adapting them to the different qualities of soil and the various modes and systems of culture His Eagle Plows, as improved, are much longer, the mouldboard, landside and point, or share, all extended without any addition to the width or heel in its work; thus adapting this Plow to the more perfect turning under of the greensward, and inverting of the furrow-slice, so desirable in greensward plowing. The principle of these Plows is such, from where the furrow-slice is received upon the mouldboard to where it leaves it, that it enables the Plow to take up the furrow-slice with the greatest possible ease, bearing equally and lightly over the whole surface of the mouldboard, turning it over with the least possible bending or twisting, and preserving it flat, smooth and unbroken, laying the furrow-slices closely and compactly side by side, and creating but slight friction upon the face of the mouldboard in passing through the soil. Thus the Plow requires but very little power of draft beyond what is necessary to cut out the furrow-slice.

In testing the quality of Plows, the power by which it is moved, the ease with which it is handled, and the manner in which it completes the work, are three important points, all of which are wisely, accurately and judiciously preserved in these improved Plows.

The character of these Plows for ease of draft and management, and the excellence of their work, though well established in the minds of the farming community, were most fully and satisfactorily exhibited to the public at the grand trial of Plows by the Massachusetts Agricultural Society, at Worcester, October 9th, 1844, whose able and impartial committee awarded the highest premium of $50 to B. Martin, for the best Plow, for doing the best work with the least draft, in a trial open to the whole Union—this Plow running in its natural course, and keeping its true position, without any effort of the plowman, and turning a furrow 12 inches wide and 6 inches deep, with a much less draft than any other Plow on the ground.

These Plows, as improved, are considered to be nearest to perfection of any implements of the kind in this country, as well in respect to material and workmanship, as in form of construction.

At the late Cattle-Show and Plowing-Match of the Worcester County Agricultural Society, in the heart of that most valuable agricultural county, B. Martin's Plow received the highest and most enthusiastic commendation from intelligent and experienced practical farmers, who know and are the most competent judges.

His castings are of a superior kind, the workmanship not inferior to any other Plows in this country, and his timber being the very best of white oak; and every farmer knows that good timber in his Plows is of the utmost importance—all of which in fact renders B. Martin's Plow the very article every farmer wants. The high character of these Plows is abundantly sustained by a continued and extended patronage, which the manufacturer hopes by his efforts and exertions to retain Being himself an experienced Plow-Maker, he will not spare any exertions in order to render his Plows a superior article.

Gentlemen are requested to call and examine these Plows before they purchase. JOSEPH BRECK & CO.

Boston, March 24.

CORN SHELLER.

A Corn sheller is one of the most convenient and labor saving implements that the practical farmer has in use. Various machines for this purpose have been invented. It can be used in all cases for large or small sized ears. It is very simple in its construction, and durable in its operation, and no way liable to get out of order; one man can work it to good advantage, though a man to turn, and a boy to feed it, works it much better than one alone. They are so light and portable, as to be easily removed from place to place, and one machine will serve for several families or even the inhabitants of a small town.

For sale at the Agricultural Warehouse and Seed Store Nos. 51 and 52, North Market Street.

JOS. BRECK & CO.

FARMERS' ALMANACK FOR 1846.

For sale at the N. E. Farmer Office, Thomas's Almanac for 1846, by the hundred or dozen.

Boston, Nov. 4.

MISCELLANEOUS.

Clerical Eccentricities.—Rev. Mr S——, was a man of many eccentricities, and not a very animated or interesting preacher. As he advanced in years, he became even less engaging, and his people—although they respected their good old pastor, and were disposed to keep the right side of him, in expectation of a legacy—felt it quite a relief if they could find a plausible excuse for absenting themselves from his meetings.

When any family was absent two or three Sabbaths in succession, Mr S——, would publicly state to the congregation that as Mr——'s family had been for some time absent from public worship, he presumed there was sickness or trouble in their household, and would appoint a prayer meeting at their house on the next Tuesday afternoon.

For a while, this answered the purpose, and he found that the people preferred even to hear him preach in the great congregation, than to have the almost exclusive benefit of his prayer meetings.

He was, however, at times, obliged to resort to other measures to fill his house; for, although the families took care to be represented on the Sabbath, they took especial care not to come out *en masse*, so that the hearers of the Parson, in his spacious temple, were generally few and far between.

On one Sabbath afternoon, he told his people that he should take a journey the next day and be absent for a short time; but he would take care that some person should come from Boston on the next Saturday and supply his desk the next Sabbath. On the next Sabbath morning, the meeting house was well filled. The whole town turned out to hear the Boston minister. They waited awhile in eager expectation of his entrance, when at last in walked the veritable old parson himself, and up the broad aisle, as he had been accustomed to do for many a year gone by. On ascending his pulpit, he smiled graciously upon his large audience, and said—"I am glad, my dear hearers, that I have got you out—you 're all here as you ought to be—and I hope your minds are prepared to receive instruction. *I came from Boston yesterday, myself!*"

Parson A. not unfrequently visited his brother S., above mentioned. They were on such excellent terms that they could give or take a joke in the spirit of it, and were in the habit of giving when they *could*, and taking when they *must*. Mr A. had generally the advantage in the war of wit, but not always. They had agreed upon an exchange; and Mr S. drove up to Mr A.'s door on Saturday afternoon, just as the latter, sitting by his chamber window, was finishing his sermon. On turning himself about to greet his friend, his sermon fell out of the window to the ground, and was immediately seized and torn in pieces by the pigs. "I am sorry, brother A for your loss, and the loss of my people," said Mr S., "but I can now, on good authority, contradict a slander circulated by your enemies, that you cannot write a sermon fit for hogs. I have the evidence before me that you *can* write a sermon just fit for them, and they like it hugely. What a strange taste the hogs have—eh, brother A.!"—*Exeter News-Letter.*

A parent may leave an estate to his son, but how soon may it be mortgaged! He may leave him money, but how soon may it be squandered! Better leave him habits of industry, an unblemished reputation, a good education, and an *inward abhorrence of vice:* these cannot be wrested from him, and are better than thousands of gold and silver.

The elegant "Spoons," of the N. Y. Mercury, having been requested by a lady to write in her Album, he sat down and perpetrated the following:

Fair lady, on this spotless page,
Allow my thoughts to spread
Theirselves like maple 'lasses o'er
A slice of rye and injun bread.

Your rosy charms will soon decay—
Those blissful joys that childhood brung,
By time will soon be borne away—
So, *Go it lady, while you 're young!*

Equivocal.—"There's more in that fellow's head, Sam, than you think," said one of a dull-looking fellow, standing by. "That may be," replied the other, gravely; "but I always suspected *he had 'em!*" —*N. Y. Mercury.*

A coxcomb, talking of the transmigration of souls, said, "In the time of Moses, I have no doubt I was the golden calf." "Very likely," replied a lady; "time has robbed you of nothing but the gilding."

A Provident Man.—A man called at one of the New York hotels, and naked for a room with four beds in it. He said he usually retired so drunk, that it plagued him to find the bed unless there were several in the chamber.

GREEN'S PATENT STRAW CUTTER.

JOSEPH BRECK & CO. at the New England Agricultural Warehouse and Seed Store Nos. 51 and 52 North Market Street, have for sale, Green's Patent Straw, Hay and Stalk Cutter, operating on a mechanical principle not before applied to any implement for this purpose. The most prominent effects of this application, and some of the consequent peculiarities of the machine are:

1. So great a reduction of the quantum of power requisit to use it, that the strength of a half grown boy is sufficient to work it efficiently.
2. With even this moderate power, it easily cuts two bushels a minute, which is full twice as fast as has been claimed by any other machine even when worked by horse or steam power.
3. The knives, owing to the peculiar manner in which they cut, require sharpening less often than those of any other straw cutter.
4. The machine is simple in its construction, made and put together very strongly. It is therefore not so liable as the complicated machines in general use to get out of order.

HOWARD'S IMPROVED EASY DRAUGHT PLOUGH.

Great improvements have been made the past year in the form and workmanship of these Ploughs; the mould board has been so formed as to *lay the furrow completely over turning in every particle of grass or stubble, and leaving the ground in the best possible manner.* The length of the mould board has been very much increased, so that the Plough works with the greatest ease, both with respect to the holding and the team. The Committee at the late trial of Ploughs at Worcester, say,

"Should our opinion be asked as to which of the Ploughs we should prefer for use on a farm, we might perhaps say to the inquirer, if your land is mostly light and easy to work, try Prouty & Mears, but if your *land is heavy, hard orrocky,* BEGIN WITH MR. HOWARD'S."

At the above mentioned trial the Howard Plough *did more work, with the same power of team, than any other plough exhibited.* No other turned more than twentyseven and one half inches, to the 112 lbs. draught, while the *Howard Plough turned twentynine and one half inches, to the same power of team!* All acknowledge that Howard's Ploughs are much the strongest and most substantially made.

There has been quite an improvement made on the shoe, or land side of this Plough, which can be renewed without having to furnish a new landside; this shoe likewise secures the mould board and landside together, and strengthens the Plough very much.

The price of the Ploughs is from $6 to $15. A Plough sufficient for breaking up with four cattle, will cost about $10 50, and with cutter $1, with wheel and cutter, $2 50 extra.

The above Ploughs are for sale, wholesale and retail, a the New England Agricultural Warehouse and Seed Store Nos. 51 & 52 North Market Street, by

JOSEPH BRECK & CO.

WILLIS'S
Latest Improved Vegetable Cutter.

For sale at the New England Agricultural Warehouse, No. 51 and 52 North Market Street, Boston, Willis's Latest Improved Vegetable Cutter. This machine surpasses all others for the purpose of Cutting Ruta Baga, Mangel Wurtzel, and other roots. The great objection to other machines, is their cutting the roots into slices, which makes it almost impossible for the cattle to get hold of them: this machine with a little alteration, cuts them into large or small pieces, of such shape as is most convenient for the cattle to eat. It will cut with ease from one to two bushels of roots per minute.

JOSEPH BRECK & CO.

Nov. 1.

HOWARD'S PREMIUM SUBSOIL PLOWS.

The sub-oil Plow is unquestionably the most importan agricultural implement of modern invention. It is considered by the best informed practical farmers of Great Britain and our own country, as an indispensable article in the most profitable husbandry. Says that eminently skilful and intelligent agriculturist, Mr. Phinney, of Lexington: "such is the estimate in which I hold this important implement, that I should consider it a great piece of improvidence to put in a crop without first subsoiling the ground." The subsoil Plows manufactured by Mr. Howard, are of two sizes—the smaller obtained the highest premium offered by the State Agricultural Society at its late exhibition at Worcester. The committee to award the premium on Subsoil Plows, in their report say:—"The committee were pleased with the neatness and firmness of structure of these Plows—characteristics which have distinguished all the Plows of Mr. Howard that have come within their observation. *Utility* and not *show*, are their peculiar features. * * They were astonished to find with what ease and perfection the hard pan could be stirred, and broken to the depth and width of 8 or 9 inches, for such was the operation of the medium size Plows, with a power not exceeding that ordinarily required for moving a surface Plow at the same depth—and they found the Plow might be guided with less labor and fatigue than the surface Plow. * * They confidently recommend the subsoil Plow to the attention of the farmers of the Commonwealth."

The improvement in the length of the handles of Mr. Howard's Plows, suggested by the committee, has been made—and the undersigned are now prepared to furnish these invaluable implements wholesale and retail.

JOSEPH BRECK & CO.

N. E. Agricultural Warehouse and Seed Store, 51 & 52, North Market Street, Boston.

GRINDSTONES ON FRICTION ROLLERS.

Grindstones of different sizes hung on friction rollers and moved with a foot treader, are found to be a great improvement on the old mode of hanging grindstones. Stones hung in this manner are becoming daily more in use and wherever used, give universal satisfaction. The rollers can be attached to stones hung in the common way. For sale by J. BRECK & Co. No. 51 North Market street.

NEW ENGLAND FARMER,
A WEEKLY PAPER.

Terms, $2 per year *in advance*, or $2 50 if not paid within sixty days.

Remittances, *not exceeding ten dollars*, at any *one time*, may be made as follows:—A subscriber owes us two or eight dollars, which he wishes to remit us. He will pay this amount to the Post Master *in his own town*, and take his *receipt* for it, as money paid him on *our* account. He will then send that *receipt*, enclosed in a letter, *to us*. We pass it to the Post Master in Boston, and get the money for it. This arrangement does away with nearly the whole risk of making remittance, and puts every subscriber in possession of "suitable funds" for that purpose.

TUTTLE AND DENNETT, PRINTERS
21 SCHOOL STREET.